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# water conservation management plan

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Volume I - Implementation Plan

DECEMBER 1983



WATER CONSERVATION MANAGEMENT PLAN

FOR

VENTURA COUNTY

VENTURA COUNTY BOARD OF SUPERVISORS

in cooperation with

THE UNITED WATER CONSERVATION DISTRICT

Prepared by:

Ventura County Planning Division

Staff:

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December 6, 1983



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## ACKNOWLEDGEMENTS

The Water Conservation Management Plan was compiled by County staff in cooperation with the United Water Conservation District. The contents of the plan, however, are a product of the many local agencies and individuals providing time and input into the development of the plan. Without the input from these many participants, the plan would not have the wide support and acceptance that it has received. This plan has many contributors who deserve credit and thanks:

### The Water Conservation Steering Committee

Fran Kimball	Calleguas Municipal Water District
Irv Wilde	United Water Conservation District
Bob McKinney (Chair)	Casitas Municipal Water District
Gina Manchester	Camrosa County Water District
Suzanne Kane	Association of Water Agencies
Phyllis Dwire	Countywide Planning Program
Gerard Kapuscik	Groundwater Management Agency
Don Reeder	Farm Bureau
Don Louviere	Soil Conservation Service
Link Leavens	Resource Conservation District
John Patton	Board of Supervisors
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Mohammed Hasan	City of Oxnard
Shelley Jones	City of San Buenaventura

Association of Water Agencies (see Volume III, Appendix E for roster)

Agricultural Advisory Committee (see Volume III, Appendix E for roster)

Countywide Planning Program Advisory Committee (see Volume III, Appendix E for roster)

Bud Lee, Bob Brendler, U.C. Agricultural Extension  
Roy Wilson, Association of Water Agencies  
Rex Laird, Farm Bureau  
Ron Wherry, Oxnard Frozen Foods Cooperative  
George Moore, Certified Landscape Architect, Ventura  
Patti Seastrom-Price, Development of Water Resources  
Barry Ryan, Goleta Water District  
Cornellius Ullman, Resource Conservation District  
Ed Thornhill, Metropolitan Water District of Southern California

... and many others (see Volume III, Appendix F for additional individuals contacted).



## GUIDE TO VOLUME I

Volume I is the Implementation Plan for the Countywide Water Conservation Program. This volume outlines the activities that will carry out the recommended water conservation measures. The volume consists of two chapters.

Chapter 1 - Proposed Implementation Plan Summarizes the recommended water conservation measures and identifies who will implement them. This chapter also discusses how implementation will be monitored.

Chapter 2 - Methodology - Plan Development, Review and Updating Summarizes how the Plan was created, including information on local agency involvement, public participation, and local agencies adoption of the Plan. The ongoing updating of the Plan is also discussed.



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## INTRODUCTION

Ventura County is a water short area. County water users consume more than is available locally, resulting in an overdraft of local groundwater resources and an increasing dependence on imported water supplies. Wise water management is thus a significant concern to the County. A variety of programs are underway in Ventura County to combat water resource problems, and to improve management of the County's water resources. The attached plan focuses in on the role water conservation measures can play in improving the County's water balance.

The County of Ventura and the United Water Conservation District were awarded a Clean Water Grant (\$8,000,000) in late 1981 by the State Water Resources Control Board to support construction of the Pumping Trough Pipeline. As a condition of this grant, the County and the United Water Conservation District (UWCD) were required to prepare and implement a countywide water conservation plan. A draft version of this plan was released in September 1983. This document is the Final Plan.

This Water Conservation Management Plan is intended to bring together ongoing water conservation efforts and to conduct additional efforts that will further enhance wise use of the County's limited water supplies. In preparing the Plan, staff sought information from existing literature, expert input from inside and outside the County, and an intensive public participation process. A number of local authorities and potential implementors of water conservation programs were contacted to solicit ideas and suggestions.

It is critical to note that, although the County Board of Supervisors and the United Board of Directors are responsible for preparing the Water Conservation Plan, the authority to implement the measures lies with a number of individual agencies. The County and United cannot enforce compliance with, or implementation of, measures to conserve water. The thrust of the recommended actions contained on these pages is to encourage compliance through cooperation.

For this reason, and in an attempt to gain local acceptance and support for the recommended water conservation programs, the emphasis of this Plan is on voluntary programs. Several countywide, joint venture measures have been identified which stress mutual benefit and cost savings to participating agencies. Many local programs exist and could be expanded for little additional cost or effort.

A water conservation coordinator position has been created to oversee and encourage implementation of the water conservation measures. This Coordinator began work in January 1984 on initiating or accomplishing many of the selected water conservation activities countywide. The position has been jointly funded initially by the County and the three water wholesalers. Among other duties, the Coordinator provides support to individual agencies and the various task forces established to assist in implementation of the conservation program.

It is intended that this document be reviewed and amended on a regular basis. Programs as they are implemented will be monitored for their effectiveness and overall usefulness. Existing programs may be revised or eliminated. In a sense, the Plan will be a "living document," subject to change and growth.

# COUNTYWIDE WATER CONSERVATION MANAGEMENT PLAN

## EXECUTIVE SUMMARY

### I. INTRODUCTION

The expansion of local water conservation efforts was a major recommendation of both the 1978 and 1980 (208) Water Quality Management Plans adopted by the County of Ventura, the individual cities, and various other local agencies. Encouragement of water conservation was identified as a high priority objective in the "Countywide Water Plan for Protection, Preservation and Enhancement of Countywide Water Resources" adopted by resolution of the Board of Supervisors on August 3, 1982. Water conservation is also a major goal of the by-laws of the Ventura County Association of Water Agencies (AWA).

The attached plan identifies local water conservation measures whose expansion or initiation would contribute to more efficient water use in Ventura County. Prepared as a condition of a State Water Resources Control Board grant (\$8,000,000 towards the Pumping Trough Pipeline), the plan is a product of many local agencies and organizations' suggestions. It acknowledges the many ongoing water conservation efforts already underway, identifying areas where more effort is warranted.

The Plan is based on a set of recommendations made by a select committee of local water experts created by the Board of Supervisors. The Committee was specifically charged to determine which measures are feasible and cost-effective enough to merit inclusion in the plan. Their recommendations form the basis of the Ventura County Water Conservation Management Plan.

The Plan contains specific recommendations for action by local water agencies, cities, agricultural organizations, school districts, and various private organizations. The success of the Plan depends on the actions taken in response to these recommendations.

The Plan explores in detail the feasibility, cost, and effectiveness of all possible water conservation measures (both those recommended for action and those that were rejected). It also provides considerable background material on Ventura County's water supply situation, alternative water sources, etc. This executive summary provides a brief outline of the Plan's major conclusions and recommendations.

One key recommendation is that a person be hired to coordinate the many measures being implemented countywide. This has occurred. The coordinator is responsible for encouraging continuity in the programs assuring that program efforts are not duplicated, and supporting individual agency efforts.

### II. BACKGROUND

Ventura County uses far more water than it produces locally. About 370,000 acre feet (AF) are consumed annually, of which about 120,000 AF are used by municipal and industrial users and 250,000 AF are utilized for irrigation of crops. Of this total some 80,000 acre feet is imported and about 70,000

acre feet is obtained by overdrafting (that is to say depleting) local groundwater reserves. Since imported water is expensive and groundwater overdraft ultimately leads to depletion of the groundwater involved, efforts to reduce the gap between supply and demand are warranted.

Water conservation, by reducing demand, also reduces overdraft and dependence on water importation. It is especially effective when undertaken in conjunction with local efforts to develop additional fresh water supplies (such as the Sespe River) and efforts to increase use of reclaimed wastewater.

Ventura County's water resource situation is covered in detail in the plan.

### III. METHODOLOGY

The twin objectives of the Ventura County Water Conservation Management Plan are to identify local water conservation measures which are feasible and cost effective and to encourage implementation of the identified measures by the responsible agencies. Identification of which measures to pursue and how best to pursue them was the responsibility of the Water Conservation Steering Committee, created by the Board of Supervisors in February, 1983.

This Committee was made up of representatives of the following organizations:

- The Ventura County Board of Supervisors
- The United Water Conservation District
- Casitas Municipal Water District
- Calleguas Municipal Water District
- City of Thousand Oaks
- City of Ventura
- City of Oxnard
- Camrosa County Water District
- United States Soil Conservation Service
- Ventura County Resource Conservation District
- Ventura County Farm Bureau
- Countywide Planning Program Advisory Committee
- Ventura County Association of Water Agencies
- Fox Canyon Groundwater Management Agency

In making its decisions, the Committee reviewed recommendations from the Association of Water Agencies' Board of Directors, the Agricultural Advisory Committee, and the Countywide Planning Program Advisory Committee. These recommendations determined which water conservation measures will be implemented.

### IV. IMPLEMENTATION PLAN

A number of water conservation measures have been selected for implementation in the County. The urban water conservation measures fall into four categories: 1) Education and public relations, 2) System maintenance, 3) Regulations and policies and 4) Research. Agricultural

measures are listed as educational or information programs, and a general category of "other programs." Each recommended measure is listed in Table 1. Chapter 1 contains a description of how each measure will be implemented and which agencies will be involved.

The emphasis of the water conservation programs is on cooperative and coordinated efforts. Several of the recommended measures involve interagency agreements between a number of agencies. These cooperative programs are particularly beneficial to smaller agencies lacking the staff and revenue to conduct an independent program.

## V. IMPLEMENTATION

The Ventura Countywide Water Conservation Management Plan is a voluntary plan. Initiation of the various water conservation measures ultimately lies with a variety of local agencies and organizations. While the recommended measures are felt to be feasible and cost effective, the details and specifics are the responsibility of each separate agency.

To facilitate and assist action by individual agencies, the Steering Committee (and the plan) strongly recommended that a "County Water Coordinator" position be created to coordinate local actions. It was recommended this person be funded jointly by the three major water wholesalers (the United Water Conservation District, the Calleguas Municipal Water District, and the Casitas Municipal Water District) and the County of Ventura. Negotiation of a joint powers agreement and budget to effectuate this is complete (see Appendix D for Agreement). A County staff person has been selected to serve as coordinator for the initial six month period.

To provide overall direction and continuity to the implementation of the plan, it was also recommended that the existing Steering Committee be expanded and become part of the Association of Water Agencies (AWA). This occurred in January, 1984. In addition to meeting regularly to assess ongoing success in initiating and expanding programs, the Committee, called the AWA Water Resources Planning Committee serves as a source for task forces created to focus on specific measures (such as creation of in-school water conservation curriculum). The AWA has agreed to take a lead role in implementation of the recommended programs.

The primary "new" cost of the Countywide Conservation Program is the budget for the "Water Conservation Coordinator". Most of the activities needed, however, will be carried out by existing agency staffs. Additional expenditures by individual agencies will be encouraged with most additional costs offset by either gains in improved system operations and/or by success in conserving water. Some cost reductions will also be realized by carrying out individual agency programs more efficiently through joint efforts and shared expertise.

## VI. MONITORING

Each year the ongoing water conservation efforts will be reviewed through a survey and annual report. The annual report will serve as a formal update to the Water Conservation Management Plan; it will document the past years' water conservation effort. This annual report will also contain the proposed major program emphases on activities for the upcoming year. Several committees, and the agencies funding the coordinator's position, will review the annual work program. The direction of the Water Conservation Program each year will thus be determined by the participating agencies and reflect their needs.

## IMPLEMENTORS BY MEASURE

[illegible]

\* This list represents the primary categories of implementing agencies. Other groups or individuals could participate (ie. commercial businesses, civic organizations etc) in the programs implemented by agencies listed here.

KEY: X - Primary Implementor

T - Technical or other support

Source: Ventura County Planning Division (1984)

## CHAPTER 1 - IMPLEMENTATION PLAN

### I. INTRODUCTION

This Ventura County Water Conservation Management Plan identifies specific actions to be taken to encourage increased water conservation in Ventura County. The implementation of these measures by local agencies is voluntary. Since the initiation of specific measures is largely the responsibility of agencies other than the County of Ventura itself, the actual decisions to act on Plan recommendations rest with a variety of public and private agencies and organizations. These include the ten cities, four major agricultural organizations, the three major water wholesalers, about thirty public and private water systems, the Fox Canyon Groundwater Management Agency, some fifty mutual water companies, about forty agricultural and other (minor) systems, twenty-two school districts, and a range of private organizations (Table 1-1). The County of Ventura will not, and in most cases can not, mandate compliance by the approximately 175 local agencies affected by Plan recommendations.

The coordination needed to encourage implementation by these agencies is discussed in Section II. The Plan specifically recommends that a County "Water Conservation Coordinator" be created and the Water Conservation Steering Committee be continued in a revised role. Both of these recommendations have been implemented.

The specific urban and agricultural measures selected for action are discussed in Section III. For each measure, necessary actions are described, responsible agencies are named, cost implications assessed, and an implementation schedule presented. See Table 1-2 for summary of selected measures and implementing agencies.

Section IV contains a brief discussion of the proposed monitoring process to evaluate the effectiveness of the programs following implementation.

TABLE 1-1

POTENTIAL IMPLEMENTING AGENCIES FOR WATER CONSERVATION  
IN VENTURA COUNTY

The following agencies have authority to implement specific measures recommended in the County Water Conservation Plan.

CITIES

Camarillo, Fillmore, Moorpark, Ojai, Oxnard, Port Hueneme, Santa Paula, Simi Valley, Thousand Oaks, Ventura.

WATER WHOLESALERS

Casitas Municipal Water District, Calleguas Municipal Water District, United Water Conservation District.

WATER AGENCIES (WATER PURVEYORS)

City Water Departments

Camarillo, Fillmore, Oxnard, Port Hueneme, Simi Valley, Thousand Oaks, Ventura.

Public Water Purveyors

Camrosa County Water District, Casitas Municipal Water District, Channel Islands Water District, County Waterworks Districts 1 and 8, Meiners Oaks County Water District, Pleasant Valley County Water District, Ventura River County Water District.

Private Water Companies

Cal-American Water Company, Metropolitan Water Company, Rancho Las Posas Water Company, Santa Paula Waterworks Ltd., Southern California Water Company (Ojai office and Simi Valley office), Warring Water Company, Westlake Water Company.

Mutual Water Companies

Miramonte Mutual  
Tico Mutual  
Siete Robles  
Senior Canyon Mutual  
Casitas Springs Mutual  
Caesar Mutual  
El Rio Mutual  
Rio Plaza Mutual  
Nyeland Acres Mutual  
Garden Acres Mutual  
Dempsey Road Mutual  
Saviers Road Mutual

Sherwin Acres Mutual  
Rio Manner Mutual  
Groundstone Mutual  
Vineyard Avenue Acres Mutual  
Community Mutual  
Cloverdale Mutual  
Yerba Buena Mutual  
Crestview Mutual  
Pleasant Valley Mutual  
Lake Sherwood Mutual  
Hermitage Mutual  
L & L Mutual

Cypress Mutual  
Middle Road Mutual  
Fillmore Irrigation Company  
Goodenough Mutual  
San Cayetano Mutual  
Santa Rosa Mutual  
Academy Mutual  
Rissman Mutual  
Tobak Ranch Water Distribution System

Old Creek Road Mutual  
Keel Club Mutual  
Vineyard Mutual  
Stickland Acres Mutual  
Ocean View Gardens Mutual  
Thermic Mutual  
Sulphur Mountain Pipeline Association  
Los Ranchitos Mutual

## AGRICULTURAL ORGANIZATIONS AND WATER SYSTEMS

### Countywide Organizations

Ventura County Resource Conservation District  
United States Soil Conservation Service  
Ventura County Farm Bureau  
University of California Extension, Farm Advisor's Office  
Ventura County Agricultural Advisory Committee

### Agricultural Water Systems

Montalvo Mutual  
Farmers Irrigation Company  
Thermal Belt Mutual Water  
Southside Improvement Company  
Timber Canyon Mutual  
Stork Mutual

Agee's Farm Mutual  
Peach Hill Mutual  
Berylwood Heights Mutual  
Oxnard Mutual  
Zone Mutual

## VENTURA COUNTY PUBLIC SCHOOLS

### Elementary School Districts

Briggs Elementary School District  
Hueneme Elementary School District  
Mesa Elementary School District  
Mupu Elementary School District  
Ocean View Elementary School District  
Oxnard Elementary School District  
Pleasant Valley Elementary School Dist.  
Rio School District  
Santa Clara School District  
Santa Paula Elementary School District  
Somis Union Elementary School District

### High School Districts

Oxnard Union High School District  
Santa Paula Union High School Dist.

### Unified School Districts

Conejo Valley Unified School Dist.  
Fillmore Unified School District  
Moorpark Unified School District  
Oak Park Unified School District  
Ojai Unified School District  
Simi Valley Unified School District  
Ventura Unified School District

Private Schools - Numerous

## OTHER ORGANIZATIONS

Ventura County Building Industry Association  
Ventura County Environment and Energy Educational Council  
Ventura County Landscape Architects Association  
Ventura County Landscape Contractors Association  
Ventura County Turf and Landscape Council

Ventura County Nurserymen's Association  
Various Agricultural Cooperatives  
Fruit Growers Laboratory, Santa Paula  
Metropolitan Water District of Southern California  
California Department of Water Resources  
County Superintendent of Schools Office  
Channel Counties Water Utilities Association  
Ventura County Association of Water Agencies  
Various Irrigation Equipment Suppliers in Ventura County  
Countywide Planning Program Advisory Committee  
Teacher Education & Computer Center, Region 9, Superintendent of Schools Office  
Rancho Simi Parks and Recreation District  
Conejo Valley Parks and Recreation District

TABLE 1-2

## IMPLEMENTORS BY MEASURE

IMPLEMENTING * ENTITIES	Urban Water Conservation Measures																			Agricultural Water Conservation Measures																		
		In-school education programs	Landscape and maintenance education programs	Water Conservation Committee	Previous water usage on bills	Water conservation literature	Speaker's bureau	Leak detection program	Systemwide water audits	Customer water audits	Meter calibration and maintenance	Customer leak detection program	Landscape review guidelines	Standard development condition	Emergency ordinance	Increasing block rate structure	Meters during construction	Individual meters (condominiums, etc.)	Plant and irrigation tests	New information and research		Expand educational services	Workshops and field tours	Water system evaluation service	Pump efficiency testing program	Centralized irrigation management service	Evaporation pan/weather data	Roundtable meetings	Central agency to coordinate programs	Tailwater recovery systems/research	Meter-availability program	Flexible scheduling of water deliveries	Other research					
Retail Water Agencies (includes cities)	X	T	X	X	X	X	X	X	X	X	X	X		T	X	X	X	X																				
Cities/County (general govt.)			T	X		T	T						X	X	T																							
Landscape Professionals			X	X		T	X						X	T						T	T																	
U.C. Cooperative Extension/Farm Advisor			X	X		X	X							T					X	X			X	X	X	T	X	X	X	X	T	T	X					
Farm Bureau				X																			X	X	X	T	T	T	T	T	T	T	T					
Southern California Edison Co.				X		X																		X	T	X		X		T								
Soil Conservation Service/Resource Conservation Dist.				X																			X	X	X	T	X	X	X	X	T	T	T					
Fruit Grower's Laboratory				X																			X		T	T	X	X	X	T	T		T					
Agricultural Cooperatives				X																			X	T		T		T	X	T	T							
Irrigation Equipment Suppliers			X	X		X								T					X				T	T	T			T	X	X	T		X					
School Districts (Public and private)	X		X																																			
M.W.D. of So. Cal.	T	T	T		T	T											T			T	T																	
D.W.R. of So. Cal.	T	T	X	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	X	X			T	X	X	T	T	T		T			X					
Wholesale Water Agencies	X	T	X	T	X	X	X	X	X	X	X	X			T	X	X	X	X												T	T						
Countywide Committees	T	T	X	T	T	T								T	T	T				T	T			T	T	T	T	T	X	T	T	T	T					
Agricultural Water Purveyors			X	X	X		X	X															T	T	T	T	T	T	X		X	X						

\* This list represents the primary categories of implementing agencies. Other groups or individuals could participate (ie. commercial businesses, civic organizations etc) in the programs implemented by agencies listed here.

KEY: X - Primary Implementor

T - Technical or other support

Source: Ventura County Planning Division (1984)

## II. COORDINATION

This Water Conservation Management Plan was finalized and adopted by a number of agencies (see Table 1-3) in the County during November and December 1983. Many adopting agencies specified the actions they will take to implement those water conservation measures most cost effective to their agency. A high level of support and cooperation has been indicated amongst agencies for an effective countywide water conservation program involving a collective effort to reduce water consumption in Ventura County.

### Gaining Local Agency Support:

As further detailed in Chapter 2, during an intensive two month period local agencies with a potential role in implementation of water conservation measures were approached for their support and commitment. Each agency was given a copy of the Draft Plan and a listing of possible program activities applicable to their agency. Public agencies were asked to adopt a Resolution of Intent indicating approval of the plan and the measures to be implemented. These resolutions and support letters are found in Appendix A, Volume III.

One incentive for some local agencies to adopt the Plan came on January 1, 1984, when legislation went into effect requiring urban water purveyors with 3,000 customers or 3,000 acre-feet annual deliveries to prepare and implement a water conservation plan. (See Appendix C, Volume III for copy of legislation). This legislation is entitled Assembly Bill 797: Urban Water Management Planning, and affects approximately 15 agencies in Ventura County.

AB 797 contains a provision allowing agencies to join together to adopt a regional plan and participate in a regional water conservation effort. The Countywide Water Conservation Management Plan for Ventura County will satisfy the requirement under AB 797 for local agencies that adopt the Plan and associated programs. Each adopting agency will, however, be required to submit supplemental specific information about their operations, service area and number of customers.

In addition to AB 797, local agency support for the Countywide water conservation program was secured because of the cost effective and beneficial nature of coordinated, voluntary activities. It is economically sensible for an agency to lower its operating costs and minimize water losses. Those agencies with ongoing, existing programs are being encouraged to "keep up the good work," share their successful ideas and help coordinate their programs with other new and existing programs.

### Water Conservation Coordinator:

To enhance the effectiveness of water conservation measures in the County, the Plan recommends that a staffing position be created to oversee and coordinate implementation of the various measures. This position has been created for a trial 6 month implementation program, from January 1, 1984, through June 30, 1984.

TABLE 1-3

STATUS

AGENCIES ADOPTING  
COUNTYWIDE WATER CONSERVATION PLAN

<u>AGENCY NAME</u>	<u>DATE OF ACTION</u>	<u>ACTION TAKEN</u>
Casitas M.W.D.	10/26/83	Resolution ; plus \$8,000 budgeted
Calleguas M.W.D.	11/16/83	Letter of Support:\$8,000 budgeted
United W.C.D.	11/21/83	Resolution ; plus \$8,000 budgeted
Camarillo	10/12/83	Resolution
Moorpark	12/7/83	Resolution
Ojai	11/22/83	Resolution
Oxnard	11/15/83	Resolution
Port Hueneme	11/16/83	Resolution
Santa Paula	10/17/83	Resolution
Simi Valley	*	
Thousand Oaks	10/18/83	Resolution
Ventura	11/21/83	Resolution
Camrosa W.W.D.	11/8/83	Resolution
Channel Islands C.S.D.	1/9/84	Resolution
County Water Works #1	12/6/83	Resolution
Ventura River C.W.D.	*	
Pleasant Valley C.W.D.	*	
NCBC - Port Hueneme	11/10/83	Letter
U.S. Forest Service	*	
Southern Calif. Edison Co.	*	
Rancho Simi Parks/Rec.	10/6/83	Resolution
Rancho Conejo Parks/Rec.	*	
Southern Calif. Water Co.	*	
Cal-American Water Co.	*	
Westlake Water Co.	*	
Metropolitan Water Co.	*	
M.W.D. (So. California)	10/21/83	Letter
D.W.R. (Los Angeles)	11/29/83	Letter of Support
Santa Paula Waterworks	10/20/83	Letter
Meiners Oaks C.W.D.	*	
Warring Water Company	*	
County Superintendent Schools	10/31/83	Resolution
Resource Conservation District	11/10/83	Resolution
Farm Bureau	11/9/83	Letter
Farm Advisor	9/22/83	Letter
Association of Water Agencies	11/22/83	Resolution
Fruit Growers Laboratory	*	
Groundwater Management Agency	12/16/83	Resolution
Fillmore	11/8/83	Resolution
Point Mugu	11/10/83	Letter
VRCS	11/10/83	Letter
Ventura County Board of Supervisors	12/6/83	Resolution ; plus \$37,700 budgeted

\* Action pending

Source: Ventura County Planning Division (1983)

The position is presently a County staff position, jointly funded for the initial 6 month period, via a joint powers agreement (see Appendix D, Volume III) by the County and the three wholesale water agencies (Calleguas MWD, Casitas MWD, and United WCD). The program budget and cost allocation plan are listed in Table 1-4.

The coordinator began work in January 1984, at the County Resource Management Agency, Planning Division. The duties and responsibilities for that position include the following:

- 1) Prepare monthly status report of progress and accomplishments on components of the Program.
- 2) Negotiate interagency and cooperative agreements among agencies jointly conducting specific programs.
- 3) Provide staff support to the new Water Resources Planning Committee (was Water Conservation Steering Committee) of the Association of Water Agencies, which committee shall include a representative of each of the funding agencies as well as other local implementing agencies.
- 4) Assist local agencies in implementing water conservation measures and conducting water conservation programs, including both individual agency activities and joint venture programs.
- 5) Prepare proposals necessary to obtain grants and other sources of funding when appropriate.
- 6) Inform State and local agencies of the status of implementation through publication of a water conservation newsletter.
- 7) Conduct an annual survey of water use to measure usage trends and to monitor the effectiveness of local water conservation efforts.
- 8) Evaluate the overall effectiveness of each implemented water conservation measure.
- 9) Conduct workshops in cooperation with local agencies on water conservation topics.
- 10) Coordinate and encourage participation in those water conservation measures selected and described in Section III to reduce urban and agricultural water demand.
- 11) Collect and make available the information and data resulting from research and development of water conservation techniques and related studies.

The Coordinator position is presently funded through June 1984; at that time an assessment will be made by funding agencies and the Water Resources Planning Committee of the Association of Water Agencies. Ongoing implementation of the Water Conservation Management Plan, in general, and the role of the Coordinator, in particular, will be decided at that time.

TABLE 1-4

PROGRAM BUDGET \*

water conservation coordinator

(November 1983 - June 1984)

ITEM	FUNDING AGENCY			
	COUNTY	CALLEGUAS	CASITAS	UNITED
Coordinator Salary (Nov. - Dec. 1983) (@\$46.45/hour**) 257 hours	\$11,900	\$0	\$0	\$0
Subtotal = \$11,900	\$11,900	\$0	\$0	\$0
Coordinator Salary (Jan. - June 1984) (@\$46.45/hour**) 900 hours				
Services and Supplies (Jan. - June '84)				
Postage 1,500				
Printing 2,500				
Travel/conferences 1,500				
Vehicle mileage 500				
Workshop costs 2,000				
\$ 8,000				
Subtotal = \$49,800	\$25,800	\$8,000	\$8,000	\$8,000
TOTAL ALL = \$61,700	\$37,700	\$8,000	\$8,000	\$8,000

\*as revised on December 8, 1983

\*\*Coordinator salary includes both salary and benefits, as well as indirect costs such as clerical support, financial support, supervisory time, office space, etc.

Source: Ventura County Resource Management Agency - Planning Division, 1983

Water Resources Planning Committee: The Water Conservation Steering Committee played a pivotal role in determining which water conservation measures would be pursued. It was created specifically by the Board of Supervisors in 1983 with this objective in mind (that is, to determine which of the many proposed measures were feasible and cost effective enough to carry out). It was recommended that the Committee be continued, with the new charge of encouraging and assisting local agencies in their voluntary compliance with the Plan.

The Steering Committee has been continued. In December 1983 the Association of Water Agencies (AWA) agreed to take a lead role in the Countywide water conservation program, including taking on the newly reconstituted Water Conservation Steering Committee as a standing "subcommittee" of the AWA. The membership of the "old" Steering Committee was expanded (see Table 1-5), the Committee was renamed the Water Resources Planning Committee and the role of the Committee was revised. The Coordinator provides staff support to this Committee.

The Water Resources Planning Committee (WRPC) will meet monthly and advise the Board of Directors of the AWA on program or policy issues relative to water conservation and reclamation. One primary function of the WRPC will be creation of task force/working subcommittees which address specific measures or programs. These task forces will work towards accomplishing the many goals set out in this Plan, specifically by assisting the Coordinator.

Five task force committees have already been created at the time of this printing. They include: Landscape Task Force, Curriculum Development Task Force, Reclamation Task Force, Agricultural Task Force and Leak Detection/Audits Task Force. Local experts in each of these program areas are included as members of the task forces. These groups will meet monthly with the goal of accomplishing some of the many activities recommended in the Plan. It is assumed that these task forces will continue to meet after June 1984, regardless of the presence or absence of the Coordinator.

In summary, the Water Resources Planning Committee (WRPC) and the associated task forces will be a major vehicle for coordinating water conservation activities in the County. It is worth noting that membership on the WRPC and the task forces is purely voluntary. Participation by agency staff members is at the discretion of the employing agency. No "new" costs are associated with operation of the WRPC per se.

A background description of the AWA can be found in Chapter 2. The role the AWA can play in supporting and initiating water conservation activities is considerable, as it is the only organization in the County with direct representation of all major water systems. The AWA has agreed, by Resolution, to take a lead role in the Countywide Water Conservation Program, working together with the four agencies funding the initial coordination effort and its own membership.

Individual Agencies: The various local agencies and organizations identified as potential implementors of the various Plan recommendations (see Table 1-1) bear the ultimate responsibility for acting on proposed water conservation efforts. Each must assess whether the proposed action

WATER RESOURCES PLANNING COMMITTEE MEMBERSHIP

BY ORGANIZATION

PREVIOUS MEMBERSHIP BY ORGANIZATION

Association of Water Agencies  
Board of Supervisors  
Calleguas M.W.D.  
Camrosa C.W.D.  
Casitas M.W.D.  
City of Oxnard  
City of Thousand Oaks  
City of Ventura  
Countywide Planning Program  
Farm Bureau (Ventura County)  
Fox Canyon Groundwater Management Agency  
Resource Conservation District  
Soil Conservation Service  
United Water Conservation District

ADDED ORGANIZATIONS

Mutual water company  
School district  
Farm Advisor  
Landscape architect  
Metropolitan Water District (S.C.)  
Agricultural water purveyor  
Other cities  
Department of Water Resources  
Irrigation equipment supplier  
Private water company  
Ventura Co. Energy & Environmental  
Education Council  
Agricultural Co-operative  
Planning department - city

TASK FORCE COMMITTEES

Curriculum materials development  
Landscape education/policies  
Emergency Planning\*  
Small systems advisory committee\*  
Agricultural programs  
Leak detection program/water audits  
Wastewater reclamation/reuse

\*Subcommittees of the Association  
of Water Agencies not directly  
related to water conservation

Source: Ventura County Planning Division (1984)

(or actions) are feasible, reasonable, and cost effective in terms of each agencies' priorities.

Many agencies in Ventura County currently pursue water conservation measures of various sorts. The Metropolitan Water District provides specific support for educational and other water conservation programs by member agencies. Many cities and water systems fund individual programs of differing levels (Volume II, Tables 3-6, 2-11). It is hoped that agencies with existing successful programs will support other agencies in developing similar programs.

The cost of implementation will be borne by the agencies themselves and in some cases, will be offset by water or energy cost savings. Actual costs to local agencies will be reduced by utilization of existing staffs, acquisition of "free" or subsidized materials (MWD, DWR), support provided by the Coordinator, the Water Resources Planning Committee, and other agencies, and negotiation of cooperative inter-agency agreements. The specific role of major water systems, cities, and other organizations will be determined during implementation. Potential implementors for each of the selected water conservation measures are identified in Table 1-2.

### III. IMPLEMENTATION: SELECTED MEASURES

The Ventura County Water Conservation Plan recommends action in thirty-one general areas. These recommendations reflect an intensive local review and long committee deliberation. The water conservation measures selected for implementation in Ventura County are listed in Table 1-6; a scheduled date for initial implementation is shown for each.

The remainder of this section is devoted to a detailed discussion of each of the recommended measures in the areas of urban and agricultural water conservation. For each recommended measure, the following items are identified:

- a) proposed actions ("Action")
- b) proposed responsible agencies ("Participants in Implementation")
- c) general costs ("Cost") and,
- d) a potential schedule for initial implementation ("Schedule").

(For information on all measures evaluated, including those not recommended for further action at this time, see Volume II).

TABLE 1-6

WATER CONSERVATION MEASURES  
&  
IMPLEMENTATION SCHEDULE

<u>MEASURES</u>	* <u>INITIAL IMPLEMENTATION DATES</u>
<u>Urban Water Conservation Measures</u>  In-school education programs Landscape and maintenance education programs Water Conservation Committee Previous water usage on water bills Water conservation literature Speaker's bureau Leak detection program Systemwide water audits Customer water audits Meter calibration and maintenance Customer leak detection program Landscape review guidelines Standard development condition Emergency ordinance Increasing block rate structure Meters during construction Individual meters (condominiums, etc.) Plant and irrigation tests Information and new research	September 1984 June 1984 February 1984 May 1984 June 1984 March 1984 June 1984 June 1984 June 1984 June 1984 June 1984 May 1984 June 1984 June 1984 June 1984 June 1984 June 1984 June 1984 January 1985 January 1985
<u>Agricultural Water Conservation Measures</u>  Expand educational services Workshops and field tours Water system evaluation service Pump efficiency testing program Centralized irrigation management service Evaporation pan/weather data Roundtable meetings Central agency to coordinate programs Tailwater recovery systems/research Meter-availability program Flexible scheduling of water deliveries Other research	May 1984 June 1984 January 1985 June 1984 July 1984 June 1984 March 1984 March 1984 June 1984 January 1985 June 1984 January 1985

\*signifies the date by which several program objectives will be accomplished

Source: Ventura County Planning Division (1983)

## URBAN WATER CONSERVATION MEASURES

### 1. Education and Public Relations:

#### a. In-School Education

##### ACTION

Local schools would acquire additional water conservation curriculum materials and teacher resource supplements to augment existing materials. An example of a program for schools could include software to accompany the Apple Computer give-away (each school in the County will have an Apple Computer). The software would be developed locally and be intended for specific grade levels (i.e., 5th and 6th grades). A hands-on learning program should accompany the software, which would include monitoring of water use at the school through leak detection by students using the computer program. Manuals for the teachers and students would be prepared to direct the learning experience with the software program. An orientation film should be made to get students started with the program.

##### PARTICIPANTS IN IMPLEMENTATION

School Districts: School district boards, administrators and teachers would be contacted to help develop the curriculum and administer the program.

Water Agencies: Water agency staff members would assist the schools in creation of the materials (software, manuals, film, teacher training etc.).

Water Resources Planning Committee: The Committee would establish a small working committee to work with water agencies and schools in developing curriculum materials and administering the program.

Coordinator: Work with school personnel, assist Water Resources Planning Committee, arrange meetings of school staff.

##### COST

The cost for this measure, which would be shared by local water agencies and individual school districts, would involve purchase of the curriculum and teacher reference materials and the time spent by existing staff to prepare and coordinate use of the materials in the schools. Materials would be purchased in bulk quantities, or donated by the MWD or DWR, thus reducing costs to each agency or school.

##### SCHEDULE

Plan Review: During local review of the Plan, the County Superintendent of Schools Office was asked to agree to coordinate the preparation of a countywide water conservation curriculum program with all the local school districts. Retail and wholesale water agencies

were asked to agree to assist in this effort with the districts in their areas.

Initial Implementation: The County Schools Office would work together with local water agencies and the coordinator to create curriculum programs, (including software for the Apple computers) for submittal to all local school districts. The Water Resources Planning Committee would advise on the specific nature of such programs. A curriculum package would be completed, approved, and ready to use by the start of the 1984-85 school year (September 1984).

Ongoing Implementation: The curriculum materials developed would be used in local schools on an ongoing basis, to be revised or updated, as needed, annually (by school personnel, water agencies, coordinator and the Water Resources Planning Committee).

---

b. Landscape Design and Maintenance Education

ACTION

Design and maintenance of urban landscaping which use less water than traditional means (i.e., turf) can significantly reduce overall urban water consumption. Education of landscape professionals, as well as homeowners and developers can help achieve this. A landscape education program should be established including an annual seminar, literature, workbooks for maintenance personnel, special sections in nurseries set aside for drought tolerant plant materials, native plant lists for landscape architects, etc., irrigation systems and plant materials. A manual should be prepared to distribute at the workshop which could be revised and updated each year. The education program should include training for landscape maintenance personnel who ultimately control the irrigations and maintain the system.

PARTICIPANTS IN IMPLEMENTATION

Landscape Professionals: (including landscape architects, contractors, maintenance personnel, horticulturalists, nurserymen, etc.). These professionals would work together to coordinate programs and create appropriate materials and training. A special committee has been created to do this; it includes Water Resources Planning Committee members and the outside professionals.

Irrigation Equipment Suppliers: Would be involved by providing materials and expertise.

U.C. Cooperative Extension: Would conduct workshops and expand existing education efforts regarding urban landscape/conservation.

Water Resources Planning Committee: A working committee has been established to work on the landscape programs.

Coordinator: Would facilitate these programs, encourage U.C. Cooperative Extension support, support the landscape committee, schedule and advertise workshops, etc.

#### COST

The cost for designing and maintaining a landscape education program countywide would involve reprinting of materials, holding workshops, and the staff time spent by all those involved (landscape architects, nursery staff, landscape contractors, U.C. Cooperative Extension, etc.). Much of this time would be donated, and proceeds from workshop registration fees could be used to recover some of the costs.

#### SCHEDULE

Plan Review: During local review landscape professionals, the U.C. Cooperative Extension, irrigation equipment suppliers and local nurseries were asked to agree to establish a countywide landscape education program and participate in ongoing implementation of the program.

Initial Implementation: A committee of landscape professionals has been established to work with the coordinator to schedule and hold seminars, prepare materials regarding landscape maintenance, possibly locate one or more demonstration gardens, identify and make available conservation literature (plant lists, etc.) to the appropriate agencies, and other related tasks. These actions, including the first workshop, would take place by July 1984. The Water Resources Planning Committee will advise in development of the programs.

Ongoing Implementation: The landscape programs developed will be maintained and updated annually. The landscape committee and coordinator would evaluate the programs in March of each year following initial implementation.

---

#### c. Water Resources Planning Committee

##### ACTION

The Committee will continue, and be expanded to include other members representing local agencies and organizations which wish to join. The role for the Committee would be broadened to include strong encouragement and participation in the implementation of the conservation measures, while continuing to advise the Board of Supervisors, and working with the coordinator. Smaller working subcommittees to be established to direct specific programs. The Committee, when reconstituted, became part of the Association of Water Agencies.

## PARTICIPANTS

Existing membership with the addition of new members from interested local agencies. The coordinator provides staff support to the Committee.

## COST

The primary cost to maintain the Water Resources Planning Committee involves printing and mailing (agenda packets and materials) and the time donated by committee members to attend meetings.

## SCHEDULE

Plan Review: During local review of the Plan, the Water Resources Planning Committee met with the Association of Water Agencies Board of Directors (AWA) to determine how and if the Committee should be associated into the AWA. The Water Resources Planning Committee was asked to recommend an expanded membership of the committee for action by the Board of Supervisors.

Initial Implementation (and ongoing): The Committee has been constituted as a formal Committee of the Association of Water Agencies. The newly constituted Water Resources Planning Committee meets on a regular basis (monthly) to advise on implementation of the water conservation programs underway. Smaller working committees have been, and will continue to be, established as needed, to work on specific programs. The coordinator provides staff support to this Committee.

---

### d. Previous Usage on Water Bills

#### ACTION

Water bills should contain information on previous usage to help customers monitor and compare their water use over time. The information should be in readable units (i.e., gallons) and be displayed to give a rapid, easy reference for comparison.

## PARTICIPANTS IN IMPLEMENTATION

Water Agencies: Water agencies would consider changing their billing system if it does not presently allow for this information to appear on the bills.

Water Resources Planning Committee/Coordinator: Would work together to encourage water agencies to do this, and provide examples of ways it can be accomplished.

## COST

The cost to print previous usage on water bills would involve staff time to alter the bills to allow for the additional information, and to reprogram the system to calculate the information and convert usage units into gallons. This could be done by existing staff at each water agency. Minimal additional cost would be involved in the ongoing practice of printing water usage on the bills.

## SCHEDULE

Plan Review: During local review, water agencies were asked to consider printing previous water usage information on the water bills, if they are not doing this at the present time. This might involve altering the billing system if the present bills will not accommodate the additional information.

Initial Implementation: During the initial phase of implementation the coordinator would contact water agencies which do not print previous usage on their bills, and work with them to add the information to the bills. Agencies which have successfully implemented this practice will be called upon to provide examples of their bills and assist other agencies upon request. The Water Resources Planning Committee would advise agencies and the coordinator as needed. This initial effort to encourage water agencies to include this information on the water bills will be completed by May 1984.

Ongoing Implementation: The coordinator would monitor which agencies have not implemented this practice and periodically encourage them to do so.

---

### e. Conservation Literature Program

## ACTION

A centralized purchasing mechanism would be established for water conservation literature. This literature would be made available to local agencies on a cost sharing basis for distribution in bills, offices, public meetings, workshops, etc. The literature would be purchased in mass quantities, and therefore made available at a reduced cost. Many procedures and handouts have been developed by other agencies which will loan the graphics out for reprinting for no charge.

## PARTICIPANTS IN IMPLEMENTATION

Water Agencies: (including city water systems) Agencies would be encouraged to purchase and distribute the literature.

Water Resources Planning Committee: The Committee will help in the selection of literature.

U.C. Cooperative Extension: Literature can be distributed from this office.

Coordinator: The coordinator would be responsible for ordering and making available the materials, negotiating interagency agreement, and administering the cost-sharing program.

#### COST

A countywide, cost sharing approach to water conservation literature acquisition and distribution would involve the bulk purchase of a number of pamphlets, bill stuffers, plant lists, etc. for use by local agencies. The cost to any one agency would be relatively low. If new literature was to be designed, the cost of the art work could be shared by participating agencies, and also kept to a minimum. The countywide acquisition of literature would supplement the existing literature program that MWD conducts in its service area.

#### SCHEDULE

Plan Review: During local review, water agencies and the U.C. Cooperative Extension were asked to agree to participate in a countywide cost-sharing, literature purchasing program.

Initial Implementation: The coordinator would work closely with water agencies to acquire or develop literature appropriate to Ventura County on a variety of water conservation topics. A number of local water agencies, cities, the U.C. Cooperative Extension, the County and possibly M.W.D., would enter into an interagency agreement to purchase the literature and distribute via offices, bills, at meetings and other means. The coordinator would negotiate the agreements and acquire the literature. The Steering Committee would advise on acquisition of the literature. By July 1984 a program would be underway, with all interagency agreements secured.

Ongoing Implementation: Each year the coordinator and Steering Committee will evaluate the literature, and new literature will be purchased if necessary. The interagency agreements could be on an annual basis, renewed by those participating agencies which wish to continue at that time.

---

#### f. Speaker's Bureau

##### ACTION

Existing speaker's bureaus should be expanded and perhaps joined together to form one countywide bureau, with volunteers available to speak to groups on water conservation topics. A list of speakers will be circulated to schools, civic organizations, professional groups etc. to make the availability of speakers known throughout the County. Speakers will be asked to donate their time (keeping the cost of the program minimal) and a rotating schedule could be made so all speakers share the responsibility equally.

## PARTICIPANTS IN IMPLEMENTATION

Speaker's Bureau: Should consist of water agency staff members and other local experts including landscape architects, water resources planning committee members and others, willing to donate time to this program.

Coordinator: The coordinator would support the program by developing and circulating the speakers list.

## COST

The only real cost associated with a speakers bureau is the time involved for the staff members which make the presentations, plus a small amount of time for someone to coordinate the schedule of speaking engagements. If agencies donated existing staff to serve as speakers, and many agencies participated, the cost to each would be minimal.

## SCHEDULE

Plan Review: During local review, water agencies were asked to agree to participate in the speakers bureau by committing staff to serve as speakers on a rotating basis.

Initial Implementation: The coordinator would establish a list of speakers, based on agreements with individual water agencies. The coordinator would then create a schedule of speaking engagements based on requests from civic groups, schools, clubs and other local organizations. Coordination of the schedule, notification of speakers regarding meetings, and publicity of the availability of the speakers bureau would be handled by the coordinator. The initial phase would be accomplished by May 1984, and continue on an ongoing basis.

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## 2. System Maintenance:

### a. Leak Detection Equipment Sharing Program

#### ACTION

A leak detection equipment sharing program may be created whereby local water agencies participate in use of one set of equipment on a rotating basis, sharing the costs of the program. The equipment, and a trained operator, would be acquired, possibly by one or more selected agencies or a grant, and allocated to interested water agencies based on their financial level of involvement. Such equipment is available and need not be costly to obtain or operate.

Other options for a jointly funded or shared leak detection program include contracting for the services of one local agency (California American Water Company) which has a good system and operator available, or using the services of other outside private consultants available to provide leak detection services.

Funding for leak detection may be available to local agencies that applied for State Leak Detection grant funds in January 1984. Other funding could be raised locally. Six Ventura County agencies had submitted grant applications as of January.

#### PARTICIPANTS IN IMPLEMENTATION

Water Agencies: Larger water agencies and agencies with a high percentage of unaccounted-for water (over 6%) will be encouraged to participate in a leak detection program. Selected water purveyors could administer the programs, possibly making the initial purchase of equipment and operator training, and sharing the costs with other users.

Water Resources Planning Committee: Will work with agencies to acquire equipment and establish the programs through creation of a working subcommittee on leak detection.

Coordinator: Will investigate equipment, contact potential suppliers, facilitate negotiation of the needed interagency agreements, and participate in the ongoing sharing of the equipment among participating agencies.

#### COST

The cost to obtain a leak detection system and train personnel to operate the system would be shared by all participating agencies. The actual cost to each agency would depend on actual usage (i.e., number of weeks per year). An agency's contribution could range from \$500 per year to \$5000 per year, depending on the size of their water system. Grant funding is available in limited amounts for purchase of equipment, which could cost as much as \$40,000-50,000.

#### SCHEDULE

Plan Review: During local review, water agencies (wholesalers and retailers) were asked to agree to enter into negotiations to create an interagency agreement to help purchase and share a leak detection system and associated personnel to operate the system. Agencies whose system water losses exceed 6% will be particularly encouraged to participate. Information was also provided on availability of State grants in this area.

Initial Implementation: The coordinator would encourage individual programs, negotiate interagency agreements, research the types of systems available, establish an initial schedule for rotation of the system amongst participating agencies, and perform other related tasks to assist the local water purveyors involved in coordinating this program. Local water districts who choose to participate will enter into an agreement regarding their contribution to the cost, and their associated use (i.e., # weeks per year) of the system. The Water Resources Planning Committee will provide support, including reviewing potential systems and program approaches. The interagency agreements

would be established by January 1985. Initial investigation into the demand for such a program and the availability of funding will take place by July 1984. The Cal-American Water Company has offered thier existing system and staff at cost to other water systems as time permits.

Ongoing Implementation: The coordinator would continue to support the interagency agreement for the leak detection equipment, including monitoring the schedule for use and maintenance of the system.

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b. Systemwide Water Audits

ACTION

Water audits are a means to determine unaccounted-for water in a water distribution system. An annual audit should be conducted by all water agencies to discover problem areas and determine if leak detection is necessary. The procedure for audits is relatively simple, and could involve use of a single form made available to water agencies. A form would be created to assist agencies in their audits.

PARTICIPANTS IN IMPLEMENTATION

Water Agencies: Would be encouraged to conduct regular water audits of their systems, using the format to be prepared as a guideline if needed. Water agencies that conduct audits regularly and have created a workable system will be asked to assist in the creation of a usable form.

Water Resources Planning Committee: Would create a water audit form and advise interested agencies in water audit techniques.

Coordinator: Provide assistance as needed to Water Resources Planning Committee.

COST

The cost to an individual water agency to conduct an annual systemwide water audit involves staff time. Field staff will collect the necessary data (regarding water use, leaks, etc.) and office staff then evaluate the information to assess the efficiency of the system and the percentage of unaccounted-for water.

SCHEDULE

Plan Review: During local review, water purveyors were asked to consider conducting annual system water audits as part of their system maintenance, if they do not presently do so.

Initial Implementation: The coordinator will assist in development of a water audit procedure, with input from the Water Resources Planning Committee and water agencies. The Coordinator will then distribute

this procedure to interested water agencies seeking assistance, and work with them to use the procedure. The Water Resources Planning Committee will work with the Coordinator to develop a format for this procedure, and advise water agencies as needed. A procedure will be developed and distributed by July 1984.

Ongoing Implementation: The Coordinator would continue to provide assistance to agencies as needed and monitor use and effectiveness of the audit procedure(s) used by water agencies.

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#### c. Water Audits for Customers

##### ACTION

Water users can also benefit from water audits, which may help identify leaks or problem areas. Water audits could be done for them, by the local water agencies. This may lead to the repair of leaks and a significant reduction in water use (and water bills). Schools and apartment buildings are two examples of large users that would benefit from such audits.

##### PARTICIPANTS IN IMPLEMENTATION

Water Agencies: Would devise a system for auditing interested users, and make users aware of this service.

Water Resources Planning Committee/Coordinator: Would assist as needed, in providing information. Should encourage water agencies to consider this as a means of educating customers and reducing overall water use.

##### COST

Staff time would be the primary cost involved in providing this service (water audit) to interested customers. It could take several hours to evaluate a customer's system to locate problems and recommend solutions.

##### SCHEDULE

Plan Review: During local review, water agencies were asked to consider providing a water audit service to interested customers, particularly large users (commercial or industrial).

Initial Implementation: Retail water agencies would devise systems for auditing customers' water use, and publicize the availability of that service. The coordinator and Water Resources Planning Committee would encourage agencies to do this and assist on request. The initial effort to encourage agencies to begin this service, and assist in preparing a procedure, would occur before July 1984. Effectiveness of the programs, and the number of agencies providing the service, will be monitored by the Coordinator. If necessary, a committee of agencies with successful programs would be created to advise on this effort.

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d. Meter Calibration and Maintenance

ACTION

Regular calibration and maintenance of meters is a necessary part of system management. Inaccurate meters can result in loss of revenue and inability to determine if, and where leaks might exist. An annual program of meter maintenance should be part of each agency operation.

PARTICIPANTS IN IMPLEMENTATION

Water Agencies: Would have a regular schedule of meter maintenance and calibration.

Water Resources Planning Committee/Coordinator: Will encourage water agencies to do this.

COST

The primary cost of this measure, which is generally accepted as a critical aspect of proper system maintenance, is staff time. The other cost would be the cost of replacing meters which cannot be calibrated or repaired. Existing staff could be utilized and the program for calibrating meters could involve an annual schedule of maintenance for each meter.

SCHEDULE

Plan Review: During local review, water agencies were asked to consider establishing a regular program of calibration and maintenance of meters in their system, if this is not already done.

Initial Implementation: The coordinator will provide assistance to water agencies on request. Water agencies will be encouraged to establish a regular meter maintenance schedule. The initial effort to convince agencies of the value of this practice will occur by July 1984. The Water Resources Planning Committee would assist as needed. If necessary, a committee of representatives of agencies with successful programs will be created to advise agencies creating a program.

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e. Leak Location for Customers

ACTION

Some large water users with unusually high water bills could contact their local water agency to get assistance in solving problems.

## PARTICIPANTS IN IMPLEMENTATION

Water Agencies: Should assist customers in determining if leaks exist upon request.

Water Resources Planning Committee/Coordinator: Will work together to encourage water agencies to start such a program.

## COST

Water agency staff time is the primary cost of providing customers with assistance in locating the cause of abnormally high water use. The amount of time spent will depend on how the availability of the service is publicized, and the number of customers requesting assistance.

## SCHEDULE

Plan Review: During local review, water agencies were asked to consider assisting interested customers in locating a problem in their system which may have caused unusually high water bills, or other problems.

Initial Implementation: Retail water agencies would, if warranted, establish (or expand) and publicize this service to their customers. The Water Resources Planning Committee and Coordinator will encourage establishment of such programs. By July 1984, the initial effort to encourage agencies to establish such a program, would be completed.

Ongoing Implementation: The coordinator will monitor the effectiveness of the customer leak programs conducted by water agencies, and continue to encourage agencies to do this. The Water Resources Planning Committee will provide support and evaluate the program, as needed.

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### 3. Regulations/Policies:

#### a. Landscape Plan Review Process - New Developments

## ACTION

City and County planning departments can adopt landscape guidelines which stress low - water using plantings and appropriate irrigation systems in new developments. These guidelines would be used by landscape architects in their preparation or review of plans. Most new residential, industrial and commercial developments require a certain percentage of landscaping and a stipulation that the landscaping plan be prepared by a certified landscape architect. Parks and Recreation departments should also make use of these guidelines. The guidelines would be prepared by an special committee of local landscape architects and other professionals.

## PARTICIPANTS IN IMPLEMENTATION

Landscape Professionals: Would form a committee to create the guidelines for submittal to the cities and county, and provide training in use of the guidelines for those who would be working with them.

Planners: Would work with landscape professionals in developing the guidelines, and then refer to these guidelines when working with developers and preparers of landscape plans.

Water Resources Planning Committee/Coordinator: Provide support, assist in preparation and distribution of the guidelines and monitor their usefulness.

## COST

The cost for instituting and maintaining the review process for landscaping in new developments would be minimal. Local city and County planning departments have existing mechanisms for reviewing landscape plans. This measure would involve the initial establishment of guidelines which stress low water use plant materials and water efficient irrigation systems. A committee of landscape professionals would create the guidelines, for adoption by local planning departments. If one set of guidelines can be used countywide, the cost to develop them is reduced. No additional staff time would be involved in the use of the guidelines.

## SCHEDULE

Plan Review: During local review, city and County planning departments were asked to consider adopting landscape review guidelines for projects and land divisions/tracts which stress installation of low water use plant materials and irrigation methods. A committee of landscape architects was created asked to prepare an example set of guidelines for the cities and County to consider adopting.

Initial Implementation: The coordinator and a committee of landscape architects (and interested planners) will work together to prepare the guidelines and submit them to each jurisdiction, for approval. Each city (and County) planning department was contacted for their input into preparation of the guidelines. The Water Resources Planning Committee will advise as needed. Each agency will be approached to adopt the guidelines by June 1984.

Ongoing Implementation: Once these, or other guidelines are adopted by each jurisdiction, the coordinator will review their effectiveness and work with cities to evaluate, and if necessary update, the guidelines. The Water Resources Planning Committee and landscape architects committee would advise as needed.

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b. Model Home - Standard Development Condition

ACTION

City and County planning departments will be encouraged to adopt a standard development condition requiring water and energy efficient model homes in new residential developments. The model home would provide literature to prospective buyers about the features available.

PARTICIPANTS IN IMPLEMENTATION

City and County Planning Departments: Adopt a standard development condition (similar to the City of Thousand Oaks) requiring model homes in new residential developments.

Water Resources Planning Committee/Coordinator: Will assist planning departments in developing this condition and identify which features could be included in model homes. The coordinator would monitor the effectiveness of the condition and the model homes.

COST

The cost to develop a standard development condition is minimal, as good examples already exist. The real cost to implement this measure would be borne by developers, who would be responsible for constructing the model energy/water efficient features and stocking the home with literature and personnel to discuss the features with potential buyers. Staff from each planning department would spend some time reviewing the projects, and the associated model homes, but this need not involve additional staff efforts beyond the time already spent.

SCHEDULE

Plan Review: During local review city (and County) planning departments were asked to consider adopting a standard development condition requiring developers of new residential subdivisions to install and maintain a model water/energy efficient demonstration home.

Initial Implementation: The coordinator will meet with the city (and County) planners to assist in preparation of a model home condition. The City of Thousand Oaks, which has such a condition will be called upon to discuss their condition with interested cities. The Water Resources Planning Committee would advise during this initial time period, as needed. Developers will be contacted to determine what features should be included in a model home. By July 1984, the initial attempt to encourage cities to adopt this type of standard development condition will be complete.

Ongoing Implementation: The coordinator would continue to encourage cities without a model home condition to consider adopting one, and evaluate the effectiveness of the conditions which have been adopted. The coordinator would also look at some of the individual model homes. If necessary, the model home conditions adopted by local jurisdictions will be revised.

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c. Emergency Ordinance

ACTION

Each local agency would prepare and adopt a contingency ordinance for use during a drought, system failure, or other emergency. These measures should include water use restrictions such as prohibiting car washing, lawn watering, driveway washing and other non-essential uses of water during emergencies. These emergency plans would be in the form of an ordinance, providing consistency countywide in drought response measures.

PARTICIPANTS IN IMPLEMENTATION

Water Agencies and Cities: Would adopt an emergency ordinance, and implement it during drought or emergency conditions.

Water Resources Planning Committee/Coordinator: Will assist in the creation an exmple format for emergency ordinance, and work with agencies/cities to adopt their own ordinance fitted to local requirements.

COST

For those agencies which lack an emergency ordinance, the cost to develop one would be staff time. This cost could be minimized by use of a standard emergency ordinance by many local agencies. One ordinance could be developed locally (or use one that exists already) and adopted by all water agencies. If an agency has an emergency ordinance, some staff time might be involved in updating or revising the ordinance. Using existing staff, preparation or revision of emergency ordinances would not add significant costs to an individual agency.

SCHEDULE

Plan Review: During local review, water agencies were asked to agree to adopt, or revise, an emergency ordinance with contingencies for a drought or emergency situation.

Initial Implementation: The coordinator will assist local agencies as needed, by reviewing ordinances, and preparing an example ordinance for consideration by water agencies. Water agencies would consider revising the existing, or adopting the new, ordinance based on input from the Coordinator and Water Resources Planning Committee. Initial efforts to encourage adoption of emergency ordinances would be completed by June 1984. The Association of Water Agencies is helping to coordinate this effort.

Ongoing Implementation: The coordinator will periodically evaluate the development and adoption of emergency ordinances by local water agencies. The Water Resources Planning Committee will advise as

needed. Effectiveness of the ordinances themselves would be monitored if they are put into effect as a result of an emergency.

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d. Increasing Block Rate Structure

ACTION

Water agencies will be encouraged to adopt increasing block rates, rather than flat rates, uniform rates or decreasing block rates which do not encourage conservation of water. An increasing block rate involves a higher unit cost of water to the user beyond an established minimum use.

PARTICIPANTS IN IMPLEMENTATION

Water Agencies: Would consider using an increasing block rate, if not presently doing so.

Water Resources Planning Committee/Coordinator: Would encourage water agencies to reconsider rate structure.

COST

The cost to change from one rate structure to another involves staff time in evaluation of the existing rates, justification to the Public Utilities Commission of the change (for some agencies) and justification to the customers regarding the rate change. The actual cost would depend on the size of the agency, the magnitude of change in what individual customers would pay and the existing rate structure. In any case, existing staff could be used.

SCHEDULE

Plan Review: During local review, water agencies (retailers) were asked to review their rate structure and consider adopting an increasing block rate, if they currently have another type of rate. In particular, agencies with flat, or decreasing block rates, were encouraged to consider changing to a more conservation oriented rate structure such as uniform or increasing block rates.

Initial Implementation: The coordinator will encourage water agencies with decreasing block rates, flat rates or uniform rates to review, and perhaps change, their rate structure. The Water Resources Planning Committee will provide support and advise as needed. As part of an annual survey of local water use and water conservation programs, the Coordinator will also collect information on the rate structures used by local water agencies. By July 1984, local retail water agencies will have been contacted and encouraged to review their rate structures.

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e. Water Meters During Project Construction

ACTION

Contractors would pay for water used during construction based on actual use, by placing a temporary meter at the construction site.

PARTICIPANTS IN IMPLEMENTATION

Water Agencies: Would be aware of new construction, and supply meters to contractors for temporary use (during construction) after which a permanent meter would be installed.

Water Resources Planning Committee/Coordinator: Will encourage water agencies to require construction meters.

COST

The cost of this measure involves the purchase of small temporary meters, and the staff time to administer their use on construction sites. Existing staff could be used to accomplish this. Actual costs would be minimal.

SCHEDULE

Plan Review: During local review, water purveyors were asked to agree to adopt a policy which requires placement of temporary (small) meters on construction hydrants at construction sites, for projects of a certain minimum size.

Initial Implementation: By July 1984, the coordinator will have contacted local water agencies to assist them in adopting such a policy if they do not already have one. The Water Resources Planning Committee will assist as needed. Ongoing implementation would involve the coordinator monitoring the effectiveness of this measure countywide, and the Water Resources Planning Committee's assistance as needed, to continue to encourage adoption of this policy by water agencies.

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f. Meter New Individual Condominium Units (where feasible)

ACTION

Water agencies would encourage developers of new condominium units to put individual water meters on each unit to discourage water waste. Many existing condominium dwellers do not know how much water they consume and might change their use patterns if they were responsible for paying their own water bill. This program will be considered only on condominiums where it appears cost effective.

## PARTICIPANTS IN IMPLEMENTATION

Water Agencies: Would encourage developers to individually meter condominium units where cost effective.

Water Resources Planning Committee/Coordinator: Will work together to identify where meters (on indoor use) on condominium units are cost effective. Provide support where needed.

## COST

The primary cost of this measure is the purchase of meters. This measure could be costly, which is the reason for determining the cost effectiveness of installing the meters on individual units prior to construction. If it is determined that installation of individual indoor meters on a particular condominium unit is beneficial, the additional cost to a water agency of this measure would be staff time to install the meters. The cost of the meters could be passed on to the developer through the water hook-up fees.

## SCHEDULE

Plan Review: During local review, water agencies were asked to consider requiring individual meters on new condominium units of a specific type or size, where cost effective.

Initial Implementation: The Coordinator will work with water agencies to assess the feasibility of this requirement, with input from the Water Resources Planning Committee. Water agencies would be encouraged to make this a standard requirement on some new condominium units, if they presently do not do so. The initial phase of implementation would be completed by July 1984, with all water agencies being contacted. The effectiveness of this requirement will be monitored annually by the coordinator and the Water Resources Planning Committee together with the agencies having such a requirement.

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## 4. Research:

Research and study is needed in several areas of urban water conservation. Tests could be conducted of new plant materials, local water requirements for various plants (turf types) could be calculated and new irrigation systems could be tested for efficiency, etc. The Water Resources Planning Committee would identify these needs and determine the appropriate entity to conduct the research. The Coordinator would seek grant or other funding support and provide assistance as needed.

## COST

If existing research organizations (i.e., local universities) are utilized, additional research costs may be minimal. Local needs (data, information, etc.) could be identified and the appropriate entity contacted. Grant funds may be available for new research. The local financial contribution to

research would most likely be in the distribution of the data rather than in conducting the research itself. Much existing local expertise and knowledge can be tapped, without adding cost.

#### SCHEDULE

Plan Review: During local review, water agencies, landscape professionals, schools, cities and others were asked to identify specific information or research needs. This information request included: cost effectiveness analysis of specific conservation techniques, water requirements of certain plant types, new irrigation systems, etc.

Initial Implementation: The coordinator would compile a list of these needs and seek funding and/or sources of this information. Once the information is located, or the research performed, local agencies could be selected to disseminate or publish the resulting data. The Water Resources Planning Committee and the Coordinator would evaluate research needs annually. In particular, the U.C. Cooperative Extension will be notified of their potential role in conducting, or overseeing research. The data resulting from studies or information searches, would be published in local professional journals, newsletters and through the Coordinator.

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## AGRICULTURAL WATER CONSERVATION MEASURES

### 1. Educational Programs/Information

#### a. Education and Information Services

##### ACTION

Existing local educational services for farmers on efficient irrigation, appropriate systems, use of fertilizers, proper irrigation scheduling techniques and other topics, will be expanded and publicized to reach a greater number of farmers. This could be done by shifting the priorities of existing staff, or adding staff. Services would include more newsletters and other literature, more workshops and the addition of more technical assistance as needed. Agencies providing these services will coordinate their efforts in order to complement one another and reduce duplication.

##### PARTICIPANTS IN IMPLEMENTATION

Soil Conservation Service/Resource Conservation District: SCS will consider expanding staff in order to provide services to a greater number of farmers, and to work on creating new technical assistance services. This will be addressed in the 5 year implementation plan for irrigation management currently being prepared.

Farm Advisor's Office: The Farm Advisor's Office will consider adding staff or changing priorities to provide more educational services. Distribution and topics of newsletters, workshops and field calls may be expanded to accomplish this. The office has a computer system which may facilitate irrigation scheduling, evaporation pan data distribution and other information referrals.

Agricultural Cooperatives: Most local Co-ops have field representatives who visit individual farms. These representatives could be trained to advise on water use efficiency and distribute literature out in the field.

Fruit Grower's Laboratory: In addition to their irrigation scheduling service, Fruit Grower's Lab would provide information and literature to interested farmers.

Department of Water Resources: D.W.R. provides technical assistance to local communities (free of charge). Their services will be requested in areas where information is available and would be useful to the County. One such area is agricultural systems evaluations.

Farm Bureau: Will publicize educational programs to their membership.

Coordinator: Will assist agencies; coordinate efforts.

## COST

Expanded educational programs can be accomplished with little added cost. Existing staff can be utilized. Printed materials can be purchased in bulk quantities to reduce costs. In addition to staff time and literature, the cost to conduct workshops will be a primary component of educational costs.

## SCHEDULE

Plan Review: During local review the local agricultural organizations which provide educational services (S.C.S., Farm Advisor) were asked to consider expanding and publicizing their educational services.

Initial Implementation: The Coordinator will work with the S.C.S. and the Farm Advisor to identify which programs should be expanded and which new programs should be initiated. A schedule for activities to occur on a regular basis will be prepared and the programs begun by June 1984. The Water Resources Planning Committee and Agricultural Task Force will advise and assist as needed. A special agricultural education task force of the Water Resources Planning Committee will also be created if needed. The Fruit Grower's Laboratory, local agricultural cooperatives, the Farm Bureau and other local farming organizations will be asked to participate in creating and conducting various educational activities when appropriate. The Farm Bureau will publicize the programs to their membership.

Ongoing Implementation: The coordinator will oversee the education programs and monitor their effectiveness on an ongoing basis. The programs will be revised, and new ones added, as needed. All the involved organizations will closely coordinate their own, and countywide programs, with other agencies. The coordinator will seek grant or other local funding that may become available for these programs, and seek new educational materials that are available in, and outside, the County. The Water Resources Planning Committee and Agricultural Task Force will monitor programs and advise as needed.

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### D. Conduct Workshops and Field Tours

## ACTION

Workshops and on-site tours are a valuable means for training interested farmers in various irrigation efficiency techniques as well as enhancing communication among local irrigators. Field tours involve scheduled visits to specific farms with efficient irrigation systems and management, allowing farmers to benefit from one another's expertise. These workshops tours should be scheduled regularly.

## PARTICIPANTS IN IMPLEMENTATION

Farm Advisor's Office: Will work with Soil Conservation Service to conduct tours and associated workshops (select places to be toured, print materials, organize participants etc.).

Soil Conservation Service: Will coordinate with the Farm Advisor's Office in setting up the tours, and provide technical information at workshops and tours.

Farm Bureau: Will publicize tour program to their membership and advise on needed topics or farms to be considered for tour demonstrations (efficient systems/techniques).

Department of Water Resources: Will be called upon to provide materials (literature) or technical assistance for tours/workshops.

Coordinator: Will assist Farm Advisor and S.C.S. in scheduling and conducting the tours/workshops. (Help gather speakers, materials, topics and tour locations, publicize the tours).

#### COST

The primary cost to conduct workshops and field meetings (on-site tours) is staff time to coordinate the program and the cost of the materials which accompany the workshop/tour. Some of these costs could be offset by a small registration fee for the programs, although the costs may be minimal. Existing staff could be utilized.

#### SCHEDULE

Plan Review: During local review, the S.C.S. and the Farm Advisor were asked to agree to expand their existing workshop/on-site tour program. The Farm Bureau was asked to publicize these programs to their membership and assist in identifying topics, speakers and demonstration farms for use in the workshops/tours.

Initial Implementation: The Coordinator will work with the S.C.S. and the Farm Advisors to create a schedule of, and topics for, workshops and field tours. Speakers will be identified, most of which would be local experts in various aspects of irrigation management. The Department of Water Resources and the U.C. Davis Agricultural and Soil Science staff will be asked to assist as needed. The Water Resources Planning Committee and Agricultural Task Force members will provide support and advise as needed. An initial schedule of proposed workshops and tours will be prepared by July 1984, including completion of at least one of the workshops/tours. Materials for the tours can be gathered by the Coordinator, at the suggestion of the S.C.S. and the Farm Advisor.

Ongoing Implementation: An annual evaluation will be made by the Coordinator and participating agencies as to the effectiveness of the tours and workshops. New topics will be identified for additional workshops. The Coordinator will continue to oversee the program, with assistance from the Water Resources Planning Committee, Agricultural Task Force and participating farming organizations.

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c. Agricultural Water System Evaluations

ACTION

The Soil Conservation Service currently performs evaluations of individual irrigation systems, and their management, upon request. This program is valuable and would be expanded both in content and number, with more publicity so farmers are more aware of the service (which is free). Related to this, the Department of Water Resources will be contacted to request that they supply Ventura County with a Mobile Agricultural Laboratory van for a given time period to perform irrigation system evaluations on selected farms.

PARTICIPANTS IN IMPLEMENTATION

Soil Conservation Service and Farm Advisor's Office: Will consider adding staff or diverting existing staff efforts to allow a greater number of evaluations to be made.

Department of Water Resources: Would provide Mobile Lab for demonstration in Ventura County. Should provide technical expertise in system analysis.

Farm Bureau: Will publicize program to their membership.

Coordinator: Will work with agencies to accomplish this expanded level of service. Will contact State for assistance as needed, specifically to negotiate with DWR for the Mobile Lab.

COST

The cost to conduct an agricultural water system evaluation, which S.C.S. provides free of charge to interested farmers, is staff time. If this program were to be expanded, allowing a greater number of farmers to make use of the service, the S.C.S. would have to add new staff, as their existing staff are already overloaded. The cost to do this would be significant. The S.C.S. has requested additional staff and the Federal S.C.S. office is considering this request. If DWR's mobile lab were made available locally, it would cost nothing (to local agencies).

SCHEDULE

Plan Review: During local review, the S.C.S. were asked to continue to pursue funding for additional staff in the local office to expand the number of agricultural system evaluations they provide. The S.C.S. was also asked to consider changing the priorities of existing staff to allow for more system evaluations. Also, during local review, DWR was contacted to reiterate the local desire to acquire the Mobile Lab for a local demonstration.

Initial Implementation: The Coordinator will meet with S.C.S. staff and identify ways the agricultural system evaluation program would be expanded, and assist in the expansion as needed. The Farm Bureau will

be asked to publicize the service to their members and advise on program expansion if necessary. The Water Resources Planning Committee and Agricultural Task Force members will assist as needed. DWR staff will be contacted to advise. By January 1985, the initial phase of implementation, including the expansion of the agricultural system evaluations conducted by S.C.S. and possibly the DWR Mobile Lab, should be complete.

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d. Well Pump Efficiency Testing

ACTION

The Southern California Edison Company would consider expanding their existing pump-test and analysis program in Ventura County to meet the increasing demand. The program would include a schedule of annual inspections for participating farms and should be restructured slightly to provide more information about water/energy efficiency (like P.G.&E. program in Bakersfield).

PARTICIPANTS IN IMPLEMENTATION

Southern California Edison:

Would consider expanding their pump test program and staff in Ventura County as described above.

Local Farming Agencies (SCS, Farm Advisor, Farm Bureau): Will publicize the program, and provide guidance in using the information developed by the pump tests.

Coordinator: Will work with Southern California Edison and local agencies as needed to promote the program and monitor its use.

COST

The cost to the Southern California Edison Company to expand their existing well pump testing program would be staff time. The costs for the existing program, and presumably an expanded version, are covered by a small conservation program surcharge which energy customers pay based on energy consumption. The service is presently free to farmers that use it.

SCHEDULE

Plan Review: During local review, the Southern California Edison Company was asked to consider expanding, in content and numbers, the well pump efficiency testing program in Ventura County. S.C.E. was asked to add staff, if this is necessary to expand the program.

Initial Implementation: The coordinator would meet with S.C.E. staff to discuss the well pump testing program and identify ways the program would be expanded. By July 1984 the initial effort to expand the

program, including increased publicity of its availability, will be complete. The Farm Bureau, and other local farming agencies, will be asked to assist, as needed, including publicizing the program. Ongoing implementation would involve annual evaluation of the success of, and demand for, the program. The coordinator and S.C.E. will work together to accomplish this. The Water Resources Planning Committee and the Agricultural Task Force will assist as needed, throughout implementation.

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e. Irrigation Management Service

ACTION

A program similar to that of Fruit Grower's Laboratory, providing service to participating farmers regarding irrigation scheduling, will be considered. (One means to do this would be use of a computer program (El Dorado County has this) and field staff to provide farmers with exact information on when, and how much, to irrigate based on field sampling and other data.) The Farm Advisor's Office has a computer which might accommodate such a program.

PARTICIPANTS IN IMPLEMENTATION

Farm Advisor's Office: Would consider this program if there is a demand. El Dorado County program could serve as a model.

Fruit Grower's Laboratory: Should consider expanding their existing program and work with other agencies to coordinate larger program.

Coordinator: Would explore the demand for this program and help initiate one if it is warranted. Would work with appropriate agencies to do this.

COST

Many costs are potentially involved in an irrigation management service to farmers, which could be partially, or fully offset by fees for use of the service, or grants. The costs involve staff time (to make field calls, analyze data, calculate irrigation needs and inform users of the service of the irrigation schedule), possible use of a computer to process the data/analysis and associated program materials. If existing software, hardware and staff can be utilized, costs would be minimized.

SCHEDULE

Plan Review: During local review, the Farm Advisor's Office was asked to consider the value of creating a centralized irrigation management service for local farmers. The S.C.S. and other local farming agencies were asked for their input as well. The Fruit Grower's Laboratory, which presently provides a similar service, was contacted and asked for their input as to whether their own program could be expanded and whether a new program is warranted.

Initial Implementation: The Coordinator will review the input regarding possible creation of an irrigation management service. The Farm Advisor would work with the coordinator and other local agencies to establish such a program if it appears useful. The coordinator would seek grants, program materials, existing software, negotiate interagency agreements, assist in preparation of a budget for the program and other related tasks as needed. The Water Resources Planning Committee and Agricultural Task Force will assist and advise as needed. By July 1984, if this program has local support and is warranted, the initial phase of implementation will be complete. Creation of the program specifics and potential users, selection of the appropriate agency to coordinate the program and designation of staff to conduct the service would occur after June 1984.

Ongoing Implementation: If the program is established, the coordinator and the participating agencies (or agency) would annually re-evaluate the program to determine its effectiveness. If necessary, the program would be revised or expanded. Users of the service would be surveyed. The Water Resources Planning Committee would continue to advise as needed.

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f. Weather Data/Evaporation Pan Program

ACTION

Evaporation pans or weather stations would be placed in selected locations throughout the County, with a single agency or individual taking responsibility for recording data. The Farm Advisor's Office would disseminate the information in a local publication or on the phone through Tele-Tip. This data is very useful to farmers in estimating when to irrigate and how much water to apply.

PARTICIPANTS IN IMPLEMENTATION

Farm Advisor's Office: The Farm Advisor's Office could collect and give out the information provided by the weather stations or evaporation pans, and advise on the use of that information.

Fruit Grower's Laboratory: May soon develop a sophisticated climatic data station for use in the County. A fee would be involved for users.

Coordinator: Meet with possible participating agencies, negotiate agreements regarding their establishment and maintenance of data for their area.

COST

The costs involved in a countywide weather pan data collection and distribution program involve the time of agency staff members to collect data, Farm Advisor's office staff to distribute the information (via newspaper or Tele-Tip), and the cost of the stations themselves.

## SCHEDULE

Plan Review: During local review the Farm Advisor's Office was asked to agree to help coordinate a countywide program. The Farm Advisor's Office was also asked to identify locations for placement of new stations, in addition to those that are currently located around the County. The Fruit Growers Lab will be contacted for their input during initial implementation.

Initial Implementation: During the initial phase of implementation the coordinator will work with the Farm Advisor's Office to establish a countywide data collection and distribution program, including identifying locations for the stations, agencies to take responsibility for individual station data collection, and the means to distribute the data to interested farmers. The Farm Advisor and Fruit Growers Lab could also create or update materials to accompany the program and advise farmers on how to use the data in calculating the irrigation schedule. The Farm Bureau and the S.C.S. will be asked to publicize the program to their members and users. The Water Resources Planning Committee and Agricultural Task Force members would advise as needed. The initial effort to establish this program will be complete by July 1984. Ongoing implementation would involve monitoring the program's usefulness on an annual basis.

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## 2. Other Programs

### a. Agricultural "Roundtable" Sessions (Task Force)

#### ACTION

A group of local farmers and farming experts was formed to meet on a regular basis to discuss water related and agricultural topics as they relate to irrigation. This will establish a greater level of communication and interagency cooperation and provide a forum for information. This group advises the Coordinator on those agricultural water conservation programs being implemented, select areas where research is needed and generally share technical information related to irrigation. The Farm Bureau has been a lead agency for creation of this group.

#### PARTICIPANTS IN IMPLEMENTATION

Local Irrigators and Representatives of Farming Organizations/Agencies: The group formed would have general representation and should have casual, rather than formal, structure.

Coordinator: Will set up and attend meetings; assist where needed.

#### COST

The only real cost associated with creation of this group is the cost of printing and distributing information. The time of the individual members is donated, and the Coordinator provides staff support.

## SCHEDULE

Plan Review: During local review, the Bureau was asked to help establish the Agricultural Roundtable group (Task Force), including scheduling their first meeting. A list of possible members was established at that time.

Initial Implementation: The Coordinator will contact potential members, and meet with Farm Bureau staff to create by-laws or some sort of documentation of the committee's roles and purpose. A schedule of regular meeting times will be established. By March 1984 the committee will be underway, including: the membership selected, the initial meeting(s) held, the roles/purpose created and the role for the coordinator and Farm Bureau established. The group will meet regularly, advising on, and monitoring implementation, as well as other functions. Periodically the membership and roles will be revised as needed.

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### b. Identify Coordinating Agency

#### ACTION

One of the existing farming organizations (SCS, Farm Advisor, Farm Bureau) would be selected to work with the coordinator to establish the identified programs to assure consistency, appropriate utilization of services and to avoid duplication of efforts. The agency would monitor the programs, and possibly serve as the central location for materials, workshops, data, etc.

#### PARTICIPANTS IN IMPLEMENTATION

Local Farming Agencies: These agencies would agree to appoint a single coordinating agency which will provide guidance and support to the coordinator, as well as serving as coordinating agency.

#### COST

The major cost associated with the function of "coordinating agency" would be a limited amount of staff time. The selected agency will serve in a support capacity, working with the coordinator to establish various agricultural programs. Existing staff at the designated agency could be used.

## SCHEDULE

Plan Review: During local review each of the major farming organizations was asked to recommend the appropriate agency (including themselves) to serve this coordinative role. No consensus was reached.

Initial Implementation: The coordinator will meet with a group of local agricultural agencies to consider which agency should be selected to coordinate programs. This will be accomplished by March 1984. The

Water Resources Planning Committee will be asked for their input into this matter. Ongoing implementation will involve the continued coordination of programs by this selected agency. If necessary, the coordinative role could be rotated annually among the primary farming agencies.

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c. Research; Tailwater Recovery Systems

ACTION

The U.C. Cooperative Extension and the Soil Conservation Service would consider researching the cost effectiveness of tail-water recovery systems on furrow irrigated fields in Ventura County. This research would be conducted through the local Farm Advisor's Office. If tailwater recovery appears useful in some areas, information about these systems would be distributed (cost, water quality, use, grants available etc.).

PARTICIPANTS IN IMPLEMENTATION:

U.C. Cooperative Extension/Farm Advisor: Would work together to conduct research and publish results.

Coordinator: Will assist in initiating this research.

COST

The cost to evaluate and research the potential use for tailwater recovery systems on furrow irrigated cropland in Ventura County would be an individual's time (i.e., student from U.C. Riverside) to conduct the research. One or more local farms would be involved in the research. Some costs might be incurred to the farmers as profit losses or other indirect costs resulting from the use of their land for the study. Staff time and equipment acquisition are two other costs, which would be borne either by the university or the local agency sponsoring the research.

SCHEDULE

Plan Review: During local review, the Farm Advisor's Office was asked to agree to sponsor local research of tailwater recovery systems, including publishing the results of the study.

Initial Implementation: The coordinator will assist the Farm Advisor in identifying the appropriate agency to conduct the research, negotiate any agreements, search for possible grants or local funding for the study, and disseminate the resulting information/data locally. The S.C.S. will advise as needed. The Water Resources Planning Committee and the Agricultural Task Force members will advise as needed. Investigation of the potential for the research and associated publication of results would be complete by June 1984, assuming the university is willing to provide assistance.

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d. Voluntary Well Meter Program

ACTION

To assist unmetered farmers to measure water consumption, meters would be purchased by a local agency and made available (for rent, or free) to interested irrigators. Information regarding the optimal water use for specific crops, location, soil type and season would be distributed with the meters to assist farmers in identifying efficient water use. Meters should be purchased in bulk, to reduce costs, with many agencies sharing this cost.

PARTICIPANTS IN IMPLEMENTATION

Agricultural Water Purveyor(s): Would consider making meters available for irrigators (lower than market price) for temporary or permanent use. Perhaps one of the purveyors could coordinate the effort.

Other Local Agencies: Would help publicize the program.

Coordinator: Would assist participating agencies as needed (help set up the program).

COST

The primary costs for a voluntary well meter program are staff time to administer the program and the cost of the meters. Meters would be purchased in bulk quantities to reduce costs. Costs to the agency(ies) distributing the meters would be minimized if the meters were sold or rented rather than given away.

SCHEDULE

Plan Review: During local review, agricultural water purveyors was asked to consider sponsoring a well meter program for interested farmers. Local farming agencies will be asked to publicize the program to their users/members as part of initial implementation.

Initial Implementation: By July 1984, the initial effort to establish a well metering program (voluntary) in the County will be complete. During the initial implementation the Coordinator will contact agricultural water purveyors and assist in the establishment of such a program. The Water Resources Planning Committee and Agricultural Task Force will assist as needed. If the program is set up, the Coordinator will monitor its use and work with water purveyors to revise the program if necessary.

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e. Agricultural Water Delivery Scheduling

ACTION

Agricultural water purveyors would consider increased flexibility in their delivery schedules to accommodate irrigator's optimal scheduling needs. This would allow a greater level of irrigation efficiency where farmers obtain some or all of their water from a water company.

PARTICIPANTS IN IMPLEMENTATION:

Agricultural Water Purveyors: Would work with their customers to provide more flexible delivery schedules.

Local Farming Organizations: Would individually or collectively encourage purveyors to consider this.

Coordinator: Will assist as needed.

COST

It would cost very little for water purveyors to adopt a policy which allows for flexibility in delivery of water to customers. Some staff time to administer flexible scheduling might be needed. Existing staff would be used.

SCHEDULE

Plan Review: During local review, agricultural water purveyors were contacted and asked to consider adopting a flexible approach to water deliveries, if they do not already do so.

Initial Implementation: During initial implementation the Coordinator will work with irrigation water suppliers to encourage flexible scheduling. The Water Resources Planning Committee and Agricultural Task Force will advise if needed. This initial effort will be completed by July 1984.

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f. Other Research

ACTION

Many areas of irrigation (technology, management, water requirements of crops) deserve further research. When specific needs for research arise, they should be identified and the appropriate entities notified (i.e., U.C. Cooperative Extension). Research being conducted statewide (i.e., by DWR, MWD) would be consulted for applicability to Ventura County.

## COST

Research involves the cost for researcher's time, equipment and materials. If existing data and research are available, the cost to meet local research needs would be minimal. If new research is needed, grants would be sought to conduct the new research.

## SCHEDULE

Plan Review: During local review, agencies were asked to identify information which they need, and could be provided through new or existing research. The U.C. Cooperative Extension will be asked to agree to conduct, or authorize, research in the identified areas during initial implementation.

Initial Implementation: the initial effort to establish or locate research on a number of identified topics will occur by January 1985. The Coordinator will assist in initiating research, as needed. The Water Resources Planning Committee will advise on topics for research as needed. the U.C. Cooperative Extension would have the lead role in coordinating or identifying research, and in publishing data or information in local publications. The Farm Bureau will also be asked to publish information in their journal and newsletters. The SCS will advise as needed.

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#### IV. MONITORING AND UPDATING PROCESS

##### A. Annual Report

Ongoing water conservation measures being implemented in Ventura County will be reviewed annually. The mechanism for documenting this evaluation and update will be preparation of an Annual Report. This document will be prepared by the water conservation Coordinator and reviewed by the Association of Water Agencies (AWA) and the agencies funding the Coordinator's position.

The Annual Report will serve two purposes: 1) document and evaluate the programs implemented during that year, and 2) propose goals and objectives for the water conservation program during the next year. This work program will help justify continuation of the water conservation activities to participating and funding agencies.

The Annual Report will contain three sections: 1) Survey Results, 2) Progress Report, and 3) Program Objectives. A discussion of the process for developing the report and a description of each Section follows:

##### 1) Survey

Each year the Coordinator will survey water supply and use for each of the sixteen largest urban water purveyors in the County for the previous year. The survey will include a request for information on each agency's water supply by source, and water use or sales by category of user. This data will be compiled; per capita usage will then be calculated for each major urban area. The data will serve as the basis for comparing water use for different years and to identify fluctuations in water consumption patterns.

In addition to the water use survey, the Coordinator will survey local water agencies and organizations annually about their ongoing water conservation activities. Agencies will be asked to assess benefit received from the programs underway during the previous year. Their input will address both the estimated water and cost savings from the programs and the overall value of the programs to the agency staff and customers. Based on the survey results, staff will assess the effectiveness of each water conservation measure being implemented. This assessment will assist in identifying water conservation practices for the coming year.

##### 2) Progress Report

The compiled survey results will be included in the progress report. Also contained in the progress report will be a listing of the water conservation measures implemented jointly or independently by individual local agencies. The progress report will facilitate monitoring and continued coordination of the programs underway.

### 3) Program Objectives

The third section of the Annual Report will be a listing of the proposed water conservation program actions for the next year. These objectives will be based on the evaluation of the preceding year's activities. Specific tasks for the Coordinator will be identified, actions that individual agencies will be asked to take will be described, and countywide or jointly sponsored programs will be listed.

#### B. Local Review

A draft version of the Annual Report will receive local input through the Water Resources Planning Committee (WRPC) and the Association of Water Agencies Board of Directors. Their findings will provide direction for the programs during the following year. The WRPC (discussed in detail in Section II of this chapter) represents many of the agencies involved in implementing water conservation measures. This committee will participate each year in evaluation of the year's activities including assessment of the usefulness of each measure. Through review of the Annual Report, the Committee will recommend which measures should be continued and which new activities are warranted.

The WRPC recommendations will be forwarded to the Association of Water Agencies Board of Directors for their approval. Input from both of these committees will be essential, as they are leading coordination efforts on the countywide water conservation program.

Several other local committees will be asked to review the annual work program and comment on the future of the program each year. These committees are the Countywide Planning Program Advisory Committee and the Agricultural Advisory Committee. This review will be completed in June of each year and the approved final Annual Report will be distributed throughout the County and to the State Water Resources Control Board.

#### C. Funding Agency Approval

One purpose of the Annual Report is to demonstrate the program's benefits to the agencies funding the Coordinator's salary. Continued participation of these agencies will depend on their perception of the value of the water conservation measures. Some justification for continuing support must be provided in the Annual Report. Ultimately the decision to continue funding is up to each Board of Directors.

Presently the four funding agencies are the County, Casitas M.W.D., Calleguas M.W.D. and United Water Conservation District. This arrangement could change, with other agencies taking over or contributing funding for the Coordinator.

Representatives from each of the four funding agencies meet periodically to review policy matters related to coordination of the many water conservation activities in the County. A representative of the Association of Water Agencies also attends these meetings. This

committee, the Water Conservation Coordinating Committee, meets as needed, and their decisions are reported back to each respective governing Board. This committee will review the Annual Report and make formal recommendations to their Boards on the recommended level of involvement for their, and possibly other agencies, in the year to come.

In summary, the Annual Report exercise is designed to monitor program effectiveness, justify continuation to the funding and participating agencies and maintain the high level of participation and support that the program currently enjoys.



## CHAPTER 2 - METHODOLOGY: PLAN DEVELOPMENT AND REVIEW

### INTRODUCTION

The Ventura County Water Conservation Management Plan is the result of an intensive local planning effort involving the general public, private organizations, and the many local agencies which will ultimately be responsible for implementing water conservation measures. The Plan was developed over a year long period, built upon the draft Water Conservation Plan prepared in 1982 (released in June 1982). This chapter addresses the methodology used to develop the proposed Final Plan, with emphasis on the selection of water conservation measures to be implemented in Ventura County.

This chapter is divided into three sections: a) decision making process, b) local agency involvement, and c) public information.

#### A. DECISION MAKING PROCESS

##### 1. Background:

In the Spring of 1982, County staff prepared the Ventura County Draft Water Conservation Plan. This initial draft provided background information on water use in Ventura County, discussed existing and future sources of water and outlined existing water distribution systems. It also described all potential major water conservation programs for both urban and agricultural users. This list of water conservation measures was compiled from various sources, including information from the Department of Water Resources, local water agencies, and the literature. Especially important was the local study of water conservation possibilities prepared under the auspices of the Ventura County Association of Water Agencies in 1978.

In the Draft Plan, each identified urban and agricultural water conservation measure was assessed for its local feasibility. This assessment was made based upon existing information on local practices, cost, water savings and overall "reasonableness." Based upon this preliminary assessment, many measures appeared to be feasible.

The Draft Plan identified local agencies that might be involved in implementing specific measures. It also included a work plan which set out a tentative schedule for implementation.

The Draft Plan was created in about two months. Due to the very short time frame involved, the Draft Plan was largely a staff-produced effort with little public participation or local agency review. The Final Plan, on the other hand, emphasized such involvement.

The purpose of the Final Ventura County Water Conservation Management Plan was to specifically identify which water conservation measures will be implemented in Ventura County, which agencies will participate in the implementation, and how and when each measure will actually be implemented. These major decisions were made by a select Steering

Committee created by the Board of Supervisors specifically to advise the Board on the Final Water Conservation Plan. In addition, three other committees were consulted in making these decisions, as discussed below in Section 2.

## 2. Committee Process:

The recommendations contained in the Final Water Conservation Management Plan are based on deliberation by and recommendations from four committees. Each committee advised staff and the Board of Supervisors as to the reasonableness of specific water conservation measures. Primary responsibility was given to the Steering Committee, which worked directly with staff during development of the plan. Three other committees assisted in preparation of the Final Plan. The specific role and actions of the committees are discussed below.

### a. Water Conservation Steering Committee:

This committee was central to the development of the water conservation plan. It was established by the Board of Supervisors in February 1983 with the responsibility of advising staff on the preparation of the water conservation plan and of recommending to the Board of Supervisors which measures would be implemented. This committee was specifically charged with assessing the cost effectiveness and feasibility of each proposed measure.

The committee included representatives of most of the major agencies that would be involved in implementation of the plan. The membership (representing approximately 15 organizations) included many local experts in urban and agricultural water use. The agricultural sector was represented by the Soil Conservation Service, the Resource Conservation District, and the Farm Bureau. Urban water users concerns were reflected by representatives of three cities, each of the three water wholesale agencies, a local County water district, the Fox Canyon Groundwater Management Agency, and the County Board of Supervisors (see Appendix A for membership). The Association of Water Agencies and the Countywide Planning Program Advisory Committee also had representatives.

The Steering Committee met monthly (a total of 9 times) and reviewed each chapter of the plan as well as each proposed water conservation measure. Each measure was assessed for its suitability in Ventura County. New measures were added for consideration, in addition to the measures proposed in the Draft Plan prepared in June 1982. In deciding whether a given measure was feasible, the committee evaluated cost effectiveness, extent of existing implementation, and difficulty of implementation. In making its decisions the Steering Committee also considered recommendations made by three other committees, as described below.

The Steering Committee also made recommendations concerning which agencies locally are appropriate to be involved in the implementation effort and suggested how a "County water coordinator" could facilitate implementation. The specific recommendations made by the Steering Committee, and adopted by the Board of Supervisors, the United Water Conservation District and many local agencies are described in detail in Chapter 1.

The Steering Committee was the critical component in the decision making process. Their recommendations form the basis of the Final Water Conservation Plan. Their participation was instrumental in the development of a workable water conservation program for Ventura County.

b. Association of Water Agencies (AWA):

The AWA is an organization of over 75 local public and private water purveyors in Ventura County. It has been in existence since 1978. It was created as one of the actions recommended in the 1978 Water Quality Management (208) Plan for Ventura County.

This association was originally created to advise the Board of Supervisors on water issues impacting the County, such as seawater intrusion, water conservation, and waste water reclamation. A special effort was made by the AWA in 1978, when its Board of Directors created four task forces to recommend on water conservation efforts in Ventura County.

The AWA reviewed the draft water conservation plan and made recommendations from their perspective as water purveyors. Since all AWA member agencies could ultimately be involved in implementing some of the chosen water conservation programs, their viewpoint on water conservation was and is of critical importance.

Review by the AWA of the water conservation plan was carried out by a subcommittee of the AWA Board of Directors. This subcommittee met monthly to review in detail the program components. Their recommendations were reported directly to the AWA's Board of Directors, which also reviewed the plan monthly and took its own actions. The recommendations of the AWA were especially useful in addressing the potential role of local water purveyors. Their recommendations were considered by the Steering Committee in taking their actions.

The recommendations of the AWA Board of Directors are included in Volume III, Appendix E. Overall, the recommendations of the Steering Committee and the Association of Water Agencies water conservation subcommittee and Board of Directors were identical.

c. Countywide Planning Program (CPP) Advisory Committee:

The CPP Advisory Committee has been in existence since 1974; it has an active membership of approximately forty, representing public and private agencies from the following categories: public

interest groups, public agencies, and private interest groups. In addition, it contains individual citizens appointed by each City Council and each member of the County Board of Supervisors' member. The CPP Advisory Committee was established (under a different name) in 1974 as part of a federally funded program [Water Quality Management (208) Planning Program] to make recommendations for solution of problems and to formulate population and land use forecasts. The role of this committee has been and continues to be to advise the Board of Supervisors on these and other Countywide issues (such as air quality, transportation, wastewater reclamation, and solid waste management).

The CPP Advisory Committee was utilized to provide input from general citizenry and a variety of local agencies on water conservation. Their review was primarily carried out by the CPP Water Quality Subcommittee. This subcommittee consists of a number of individuals very knowledgeable about water-related issues in Ventura County. This subcommittee met a total of five times to review and comment on the water conservation plan and specific water conservation measures. The subcommittee recommendations were acted upon by the full committee. Their recommendations were quite similar to those made by the Steering Committee, with the difference being that several additional measures were recommended for implementation that were rejected by both the AWA and the Steering Committee.

The recommendations of the CPP Advisory Committee and a roster of membership of the committee can be found in Appendix E, Volume III.

d. Agricultural Advisory Committee:

The Agricultural Advisory Committee was specifically created by the Board of Supervisors to advise on issues pertinent to the agricultural industry and community in Ventura County. This committee has a membership of eleven, made up primarily of local farmers. The committee meets monthly to review proposed projects, ordinances, and land divisions which may impact agriculture. The committee is also involved in the administration of the Land Conservation Act Agricultural Preserve Program.

The Committee reviewed the Draft Water Conservation Plan and agricultural water conservation measures to provide the agricultural viewpoint. Each agricultural water conservation measure proposed was reviewed and commented on by the Committee. The Committee made formal recommendations which were presented to the Board of Supervisors in a letter dated July 12, 1983 (see Volume III, Appendix E).

The recommendations of the Agricultural Advisory Committee were similar to those of the Steering Committee in most respects.

e. Overview:

A total of approximately 100 individuals participated in the committee review of the Draft Water Conservation Plan. Time expended was approximately 900 hours, counting all meetings by all members in attendance. As mentioned above, the recommendations of these four committees, especially the recommendations of the Steering Committee, were the basis of the recommended implementation strategy adopted by local agencies and described in Chapter 1.

B. LOCAL AGENCY INVOLVEMENT

Development of the Final Water Conservation Plan would have been impossible without input from local and Statewide agencies and organizations. Many organizations and individuals were consulted in preparing the Final Plan. Special attention was given to contacting agencies who will be responsible for actually carrying out the water conservation measures recommended in the water conservation plan. Contact was made with approximately forty agencies, with the specific intention of gaining support for, as well as input concerning, the Final Water Conservation Plan. Discussions were held with these agencies concerning cost, timing and support for specific water conservation measures. Agencies contacted were also asked for their opinion about feasibility of individual water conservation measures.

The contacts with local agencies were essential because the County of Ventura (which prepared the Plan) cannot directly implement most of the measures recommended. Actual authority and responsibility lies with other agencies. In the agricultural sector, contacts were made with the Ventura County Resource Conservation District, the United States Soil Conservation Service, the Ventura County Farm Bureau, the University of California Agricultural Extension/Farm Advisor, several local farm cooperatives, and individual farmers.

Each City Planning Department was contacted concerning land use regulations affecting water conservation. A variety of water purveyors were consulted, including City water systems, other public water systems, private water companies, and each of the three major water wholesale agencies (Casitas MWD, United WCD, Calleguas MWD). A presentation was made to the Ventura County Association of Governments' City Managers Committee, to obtain a policy level viewpoint on development of a plan.

In addition to local agencies, several regional and state agencies were consulted. These included the State Water Resources Control Board, the Department of Water Resources, the Metropolitan Water District of Southern California and the State Office of Water Conservation. Contacts were also made with other agencies involved in development of water conservation plans, including the Counties of Monterey, El Dorado, and Marin, the cities of San Diego, Santa Barbara, and Palm Springs, and the Goleta County Water District, in order to learn from the programs underway in their jurisdictions.

Lastly, contacts were made with several local school districts, the Ventura County Landscape Architects Association, and the Ventura County Energy and Environmental Education Council.

A list of all individuals and agencies contacted during preparation of the Final Water Conservation Plan and Draft Water Conservation Plan appears in Appendix E. Also included is a listing of major meetings held during this period.

Overall, the effort to contact agencies to apprise them of the planning and implementation of a County water conservation program was successful. It was also essential because the County's water conservation plan is unusual in that it recommends measures to be implemented in large part by other agencies.

Special mention must be made of the support of the Department of Water Resources, Office of Water Conservation. Throughout development of the Draft and Final plans, County staff worked with State staff to receive technical assistance, input and guidance. Periodic meetings were held between staff of both agencies to check on the status of plan developments and to receive feedback on an ongoing basis on specific measures. The Office of Water Conservation also reviewed the original Draft Plan, providing input for consideration in development of the Final Plan.

#### Public Review:

More intensive public review took place during the 60 day local review of the Water Conservation Plan after its release in early September. During that time staff made numerous presentations, particularly to those agencies considering adopting the Plan. Comments received by local agencies and individuals on the Draft Plan were incorporated into the Final Plan.

### C. PUBLIC INFORMATION

In addition to contacts with individual agencies, efforts were made to provide general information to the general public concerning the Draft Water Conservation Plan.

During preparation of the Final Water Conservation Plan attempts were made to advise the public concerning the preparation of the plan and opportunities for public involvement in implementation of the plan. Newsletters were developed and released on a regular basis. Information sheets were prepared, press releases were issued and presentations were made to local groups on request. In addition, articles appeared in several local newspapers concerning the ongoing course of the water conservation efforts.

Appendix G contains examples of some of the public information materials released during the course of development of the program. An ongoing public information program will of course be a critical component of the actual implementation of water conservation measures identified in the Water Conservation Plan.

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